

## REMARKS

Reconsideration and allowance of the above-referenced application are respectfully requested. Claims 1-17 are unchanged and remain pending in the application.

Applicant hereby amends the application as required to perfect the priority claim under 35 USC §119 and 37 CFR §1.78(a)(5). Since the subject application was filed before November 29, 2000, the time periods of 37 CFR §1.78(a)(5)(ii) do not apply. See 37 CFR §1.78(a)(5)(ii)(A).

The specification has been amended to correct informalities.

The Office Action Summary indicates that a form PTO-1449 was attached, and the Office Action indicates that the IDS submitted October 13, 2000 is "being considered", however a signed form PTO-1449 was not included with the Office Action. Since the omission of the signed form PTO-1449 appears to have been an oversight, it is respectfully requested that a copy of the signed PTO-1449 be provided to the undersigned upon the next communication from the Patent Office.

In response to the objection to the drawings, a replacement sheet for Fig. 1 is attached, illustrating that the pulse shape table circuit 15 includes the tables 16 and the multiplexer 18. Support for this change is found at page 4, lines 16-17 of the specification. Hence, it is believed the drawings are in proper form.

Claims 1 and 12 stand rejected under 35 USC §102(b) in view of U.S. Patent No. 4,843,617. This rejection is respectfully traversed.

Claims 1 and 12 specify a transmission system configured for outputting a set of waveform samples. In particular, claims 1 and 12 each specify determining a phase error, and

outputting a selected waveform sample set based on the determined phase error.

Moreover, claims 1 and 12 specify that the selected waveform sample set is formed by stored waveform samples: claim 1 specifies that the waveform sample set has samples of a prescribed waveform relative to a corresponding phase offset; claim 12 specifies a pulse shape table circuit configured for outputting a selected waveform sample set of a prescribed waveform relative to a selected phase offset in response to an address signal *and* a selection signal.

Hence, the transmission system selects a set of waveform samples representing a prescribed waveform, relative to a corresponding phase offset, based on the determined phase error. Consequently, precise phase correction can be implemented in a digital circuit with minimal complexity. These and other features are neither disclosed nor suggested in the applied prior art.

Marshall et al. neither discloses nor suggests a waveform sample set of a prescribed waveform, as claimed. Marshall et al. discloses:

A microprocessor performs a table look-up for retrieving an appropriate digital correction signal in response to receiving the generated phase error signal. The table is preferably graded such that a large phase error produces a large correction signal, while a small phase error produces a proportionately smaller correction signal. The generated correction signal is applied to a digital-to-analog converter for generating an analog control voltage signal in response thereto. The generated analog signal is then applied to the control voltage input of the local clock oscillator, as described above, for completing a negative feedback loop.

(Col. 1, line 66 to col. 2, line 9).

Hence, Marshall discloses that the phase error is converted from a digital representation (i.e., a digital correction signal) to an analog control voltage signal, and then that analog control voltage signal is applied as the control voltage input to a voltage-controlled oscillator 1 for

completing a negative feedback loop.

Consequently, Marshall neither discloses nor suggests outputting a selected waveform sample set based on the determined sample error. Rather, Marshall outputs an oscillator signal controlled by an analog voltage generated from a digital representation of the phase error.

The Official Action asserts that “this phase adjusted local clock signal is the ‘selected waveform sample set’ and the generated correction signal in the reference is the ‘prescribed waveform’.” However, this interpretation is inconsistent with the specification: the specification describes that the waveform samples are stored in the tables as equal-spaced samples of the prescribed waveform, each table 16 including samples 30 of the same prescribed waveform 32 at a corresponding phase/time offset 34 (see, e.g., Figs. 2A, 2B, and 3 and page 4, line 21 to page 5, line 4).

Hence, “claims are not to be read in a vacuum, and limitations therein are to be interpreted in light of the specification in giving them their ‘broadest reasonable interpretation.’” MPEP § 2111.01 at 2100-37 (Rev. 1, Feb. 2000) (quoting In re Marosi, 218 USPQ 289, 292 (Fed. Cir. 1983)(emphasis in original)).

Consequently, Marshall et al. neither discloses nor suggests outputting “a selected waveform sample set ... having samples of a prescribed waveform relative to a corresponding phase offset” as specified in claim 1, or “a pulse shape table circuit configured for outputting a selected waveform sample set of a prescribed waveform ... in response to an address signal and a selection signal”, let alone that the phase correction module outputs “the address signal and the selection signal at the transmission time instant.”

Also note that Marshall et al. neither discloses nor suggests outputting the set of

waveform samples starting at a transmission time instant. Claims 1 and specify that the phase error is determined relative to the transmission time instant. The specification describes that the transmission time instant is “the instant in time at which the waveform is to be output by the pulse position modulation communications system 10 [] for the prescribed waveform 32 relative to a start of frame” (page 5, lines 7-9).

Marshall et al. neither discloses nor suggests outputting the waveform at a specific instant, but rather is used to complete synchronizing two signals (namely a local voltage-controlled clock signal with a remote clock signal) by completing a negative feedback loop (see, e.g., col. 2, lines 6-9 and col. 6, lines 22-34).

For these and other reasons, the §102 rejection should be withdrawn.

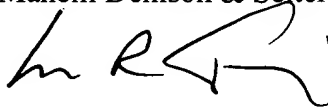
The indication of allowable subject matter in claims 2-11 and 13-17 is acknowledged and appreciated. It is believed these claims are allowable in view of the foregoing.

In view of the above, it is believed this application is and condition for allowance, and such a Notice is respectfully solicited.

To the extent necessary, Applicant petitions for an extension of time under 37 C.F.R. 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including any missing or insufficient fees under 37 C.F.R. 1.17(a), to Deposit Account No. 50-0687, under Order No. 95-346, and please credit any excess fees to such deposit account.

Respectfully submitted,

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A handwritten signature in black ink, appearing to read 'L. R. Turkevich', with a stylized flourish at the end.

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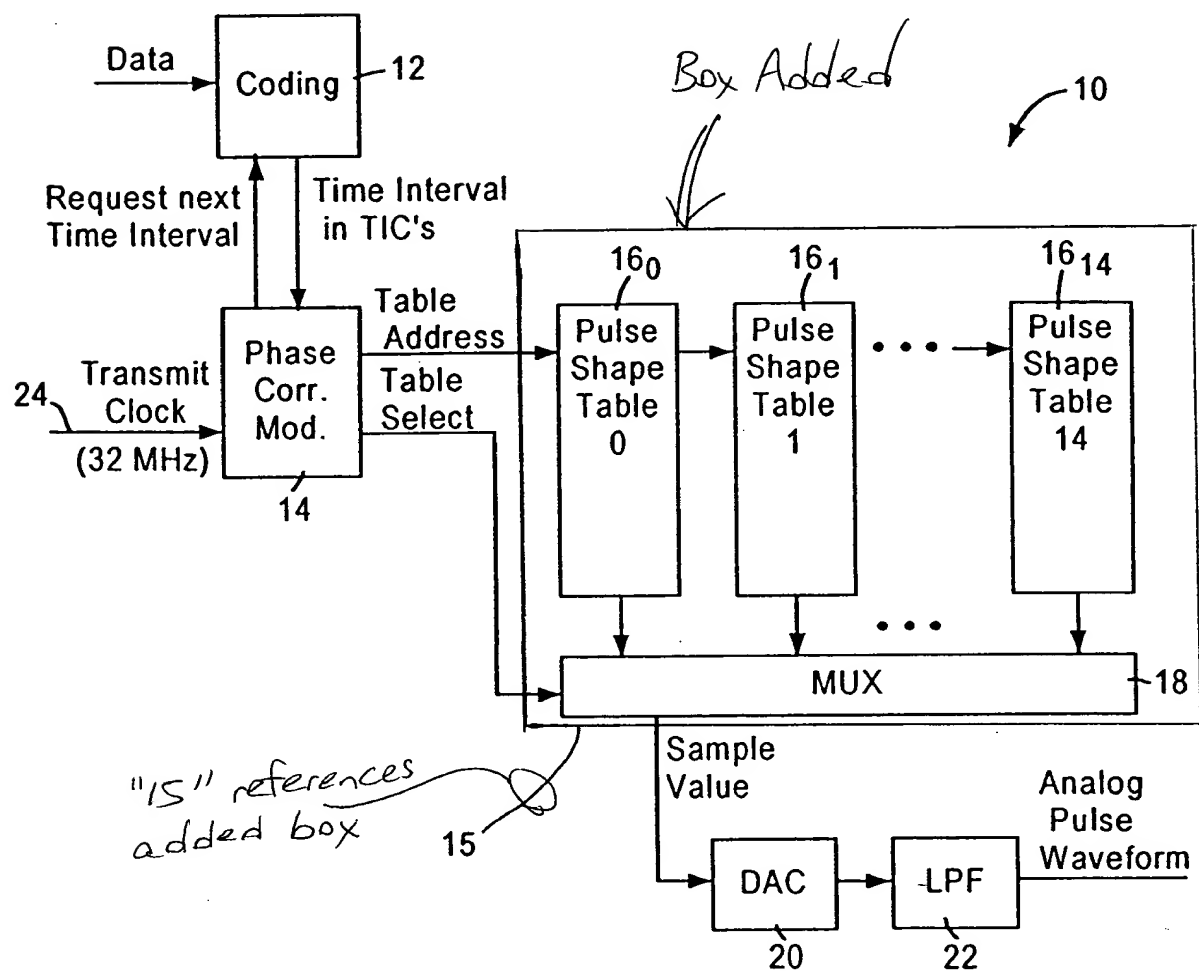


FIG. 1